IN THE CLAIMS:

Please amend claim 33, cancel claims 44, 46, 48 and 51, and add new claims 56-58.

This listing of claims will replace all prior versions, and listings of the claims in the application.

Listing of the claims

1. (Previously presented) A pyrogen-free composition comprising a plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements and a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-lα, MIP-lβ, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE and wherein said immunogen is a pathogen antigen.

2–3. (Canceled)

4. (Previously presented) The pyrogen-free composition of claim 1 wherein said immunogen is an HIV-1 antigen.

5. (Canceled)

6. (Previously presented) An injectable pharmaceutical composition comprising the pyrogen-free composition of claim 1.

7. (Previously presented) A method of inducing cytotoxic T cell response in an individual against an immunogen comprising administering to said individual a pyrogen free composition of claim 1 by intramuscular injection.

8. (Canceled)

9. (Previously presented) The pyrogen-free composition of claim 1 wherein said immunogen is herpes simplex antigen HSV2gD.

10. (Previously presented) An injectable pharmaceutical composition comprising the pyrogen-free composition of claim 9.

11. (Previously presented) A method of immunizing an individual against a herpes simplex virus infection comprising administering to said individual a pyrogen-free composition of claim 9 by intramuscular injection.

12. (Previously presented) A pyrogen-free composition comprising two plasmids: a first plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements; and a second plasmid comprising a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1,

VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE wherein said immunogen is a pathogen antigen.

13–14. (Canceled)

15. (Previously presented) The pyrogen free composition of claim 12 wherein said immunogen is an HIV-1 antigen.

16. (Canceled)

17. (Previously presented) An injectable pharmaceutical composition comprising the pyrogen free composition of claim 12.

18. (Previously presented) A method of inducing cytotoxic T cell response in an individual against an immunogen, comprising administering to said individual a pyrogen free composition of claim 12 by intramuscular injection.

19-32. (Canceled)

33. (Currently amended) A method of inducing cytotoxic T cell response in an individual against an immunogen comprising administering to said individual by intramuscular injection: a ~~nucleic acid molecule~~ plasmid comprising a nucleotide sequence that encodes said

immunogen operable linked to regulatory elements; and a nucleic acid molecule comprising a nucleotide sequence that encodes said immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE wherein the immunogen is a pathogen antigen.

34. – 35. (Canceled)

36. (Original) The method of claim 33 wherein said immunogen is an HIV-1 antigen.

37 – 41. (Canceled)

42. (Previously presented) The pyrogen free composition of claim 12 wherein said immunogen is herpes simplex antigen HSV2gD.

43. (Previously presented) An injectable pharmaceutical composition comprising the pyrogen free composition of claim 42.

44-45. (Canceled)

46. (Previously presented) A plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements and a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE, wherein said immunogen is an influenza antigen.

47-48. (Canceled)

49. (Previously presented) A pyrogen-free composition comprising two plasmids: a first plasmid comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements; and a second plasmid comprising a nucleotide sequence that encodes an immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1, VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE, and wherein said immunogen is an influenza antigen.

50. (Previously presented) A method of immunizing an individual against a influenza infection comprising administering to said individual a composition of claim 49 by intramuscular injection.

51. (Canceled)

52. (Previously presented) A method of claim 33 wherein said immunogen is an influenza antigen.

53. (Previously presented) The pyrogen free composition of claim 1 wherein said immunogen is a viral antigen.

54. (Previously presented) The pyrogen free composition of claim 12 wherein said immunogen is a viral antigen.

55. (Previously presented) The method of claim 33 wherein said immunogen is a viral antigen.

56. (New) A method of enhancing a cytotoxic T cell response in an individual against an immunogen comprising administering to said individual by intramuscular injection: a plasmid comprising a nucleotide sequence that encodes said immunogen operable linked to regulatory elements; and a nucleic acid molecule comprising a nucleotide sequence that encodes said immunomodulating protein operably linked to regulatory elements, wherein said immunomodulating protein is selected from the group consisting of: MCP-I, MIP-la, MIP-lp, IL-8, and RANTES, L-selectin, P-selectin, E-selectin, CD34, GlyCAM-1, MadCAM-1, LFA-1,

VLA-1. Mac-1, pl50.95, PECAM, ICAM-1, ICAM-2, ICAM-3, CD2, LFA3, mutant forms of IL-18, CD40, CD40L, vascular growth factor, IL-7, nerve growth factor, vascular endothelial growth factor, Fas, TNF receptor, Flt, Apo-l, p55, WSL-1, DR3, TRAMP, Apo-3, AIR, LARD, NGRF, DR4, DR5, KILLER, TRAIL-R2, TRICK2, DR6, and Caspase ICE wherein the immunogen is a pathogen antigen which when expressed in an individual following intramuscular injection of a plasmid encoding said pathogen antigen induces a cytotoxic T cell response against an immunogen.

57. (New)The method of claim 56 wherein said pathogen antigen is a viral protein.

58. (New)The method of claim 56 wherein said pathogen antigen is an influenza protein.